



PATENT
Customer No. 22,852
Attorney Docket No. 02100.0071-00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
)	
James B. POPP et al.)	Group Art Unit: 2612
)	
Application No.: 09/837,228)	Examiner: Benjamin C. Lee
)	
Filed: April 19, 2001)	Confirmation No.: 7579
)	
For: FIRE SUPPRESSION AND)	
INDICATOR SYSTEM AND FIRE)	
DETECTION DEVICE)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants respectfully request a pre-appeal brief review of this application.

I. Section 103(a) Claim Rejection Based on Granek et al. and Powell et al.

In the final Office Action, claims 1-8, 18-23, 43-49, 52-55, 60, and 61 were rejected under 35 U.S.C. § 103(a) based on Granek et al. (U.S. Patent No. 4,058,167) in combination with Powell et al. (WO 93/12839). Claims 1, 18, 43, 52, and 60 are the only independent claims rejected under § 103(a) based on the final Office Action's proposed, hypothetical combination of the Granek et al. and Powell et al. references. Applicants respectfully traverse that claim rejection since the final Office Action has failed to establish a *prima facie* case of obviousness at least because the differences in the claimed invention and the prior art are not obvious to one of ordinary skill in the art and there is no legally proper suggestion or motivation to make the Examiner's proposed, hypothetical modification to Granek et al.'s disclosure relating to fire protection systems for buildings based on Powell et al.'s disclosure relating to an apparatus for extinguishing a fire in an aircraft. Amendment filed December 28, 2005 ("Amendment") at 18-19. Moreover, the Granek et al. and Powell et al. references fail to disclose or suggest all of the subject matter recited in each of Applicants' independent claims 1, 18, 43, 52, and 60. Id. at 16-18, 20, and 22-23.

In response to Applicants' written remarks included in the Amendment explaining why the claim rejection based on Granek et al. and Powell et al. is improper, the Examiner concedes that Granek et al. does not disclose storage units and asserts that the subject matter relating to the storage units recited in the claims merely constitutes a statement of intended use. Final Office Action at 3. The Examiner thereafter relies on his intended use assertion to further assert that apartments in a building are analogous to storage units in a storage area, and that incorporating the system for suppressing fires in apartments of a building as disclosed in Granek et al. into a storage area containing storage units is an obvious intended use for the Granek et al. system. Id. The Examiner further asserts that Powell et al.'s disclosure relating to extinguishing and controlling fires in an aircraft cargo bay area supports his obvious intended use assertion. Id.

Applicants respectfully submit that the Examiner's assertions do not cure the improper nature of the § 103(a) claim rejection based on Granek et al. and Powell et al. First, concerning the Examiner's intended use assertion, independent claims 18 and 52 positively recite "a plurality of storage units" in the body of those claims. For at least this reason, the "storage units" recited in independent claims 18 and 52 are not merely part of an intended use statement. Further, even though the bodies of independent claims 1, 43, and 60 do not include the term "storage units," the preambles of those claims recite a "storage unit," and the bodies of those claims relate positively-recited subject matter to the "storage unit" recited in the preamble. According to prevailing U.S. patent law, the "storage unit" subject matter recited in the preamble and referred to in the body of the claim cannot be interpreted as a statement of intended use for the purpose of ignoring that subject matter relative to the prior art. Thus, the Examiner's intended use assertion does not render the § 103(a) rejection based on Granek et al. and Powell et al. proper.

Furthermore, the Examiner's asserted analogies concerning apartments/storage units and buildings/cargo areas are irrelevant for a number of reasons. For example, apartments are not moved into and out of a building, whereas storage units for storing freight in a cargo area are typically moved into and out of cargo areas. Granek et al.'s system, which includes conduits leading to nozzles within apartments could not be used in a storage unit that is removed from a

cargo area, since the conduits and attached nozzles would prevent movement of the storage unit from the cargo area. Further, the Examiner's assertion about an apartment building being analogous to a cargo area is inaccurate at least because apartment buildings are not intended to transport apartments from one location to another, whereas cargo areas are typically used to transport storage units. Thus, Granek et al.'s fire extinguishing system placed in an apartment building is not intended to address technical issues (e.g., such as portability, weight, bulk, durability, operation with movable storage units, etc.) that may be related to efficient movement of storage units associated with cargo vehicles. For at least these reasons, one skilled in the art would not view the Examiner's asserted analogies as being relevant with respect to the present application, and the proposed, hypothetical combination of Granek et al. and Powell et al. is legally improper.

A. Independent Claim 1

Applicants' independent claim 1 recites "[a] system for detecting and suppressing a fire condition in a storage unit for storing freight in a storage area containing a plurality of storage units, the system comprising: . . . a plurality of fire suppression devices . . . being configured to discharge a fire suppressant material into its associated storage unit upon detection of the fire condition in its associated storage unit" The Granek et al. and Powell et al. references, regardless of whether they are viewed individually or in combination, fail to disclose or suggest at least that subject matter recited in Applicants' independent claim 1. Amendment at 15-19. Moreover, as outlined above, there is no legally proper suggestion or motivation to make the proposed combination. Id. at 19. For at least these reasons, Applicants' independent claim 1 is patentably distinguishable from Granek et al. and Powell et al.

B. Independent Claim 18

Applicants' independent claim 18 recites a fire suppression system for use in an aircraft, the system including, among other recitations, "a plurality of storage units being located at predetermined positions in [a] storage area, the storage units comprising at least one of a container and a pallet; . . . and a fire suppression device configured to discharge a fire suppressant

material into the storage unit upon detection of [a] fire condition.” For at least reasons similar to those outlined above with respect to independent claim 1, the Granek et al. and Powell et al. references do not disclose or suggest at least that subject matter recited in independent claim 18.

Furthermore, Applicants’ independent claim 18 also recites a fire suppression system, including, among other recitations, “a transmitter associated with each storage unit and configured to transmit a first signal upon detection of a fire condition, the first signal being an infrared signal” Neither Granek et al. nor Powell et al. discloses or suggests at least that subject matter recited in independent claim 18. Amendment at 20-22.

In response to Applicants’ written remarks included in the Amendment concerning how neither Granek et al. nor Powell et al. discloses or suggests the above-outlined subject matter relating to infrared signals, the Examiner cites Ronald (U.S. Patent No. 5,880,867) in alleged support of his obviousness assertion. Final Office Action at 4. In particular, the Examiner asserts that Ronald discloses that “use of infrared signals as opposed to radio signals in an aircraft environment to reduce interference is well known in the art and therefore its use is obvious in Granek et al. when used in an aircraft environment vulnerable to signal interference.” Id.

Applicants respectfully disagree with the Examiner’s assertion concerning the alleged obviousness of infrared signals for a number of reasons. For example, Granek et al. does not relate to “an aircraft environment.” Rather, Granek et al. relates to a building. Thus, one of ordinary skill in the art considering Granek et al. would have had no motivation to use infrared signals to reduce interference in an aircraft environment. Further, Ronald does not disclose using infrared signals in association with a system for detecting and suppressing fires. Rather, Ronald discloses permitting passengers to maintain communication with one another during flight via infrared transmissions. The recited system configured to transmit an infrared signal from a transmitter associated with each storage unit is one particular novel and non-obvious exemplary configuration that enables a fire detection and suppression system to be used in an aircraft cargo area environment. The recited system overcomes deficiencies in the prior art and solves a long-felt but unmet need in the art. Thus, there is nothing in the prior art that would render the

subject matter recited in independent claim 18 obvious, and there is no suggestion, teaching, or motivation in either Granek et al. or Ronald to use infrared signals in association with a system for detecting and suppressing fires in "an aircraft environment," as asserted by the Examiner.

For at least the above-outlined reasons, Applicants' independent claim 18 is patentably distinguishable from Granek et al. and Powell et al.

C. Independent Claims 43, 52, and 60

For reasons at least similar to those outlined previously herein, the Granek et al. and Powell et al. references do not disclose or suggest all of the subject matter recited in Applicants' independent claims 43, 52, and 60. Amendment at 22-23.

II. Rejections of Dependent Claims under Section 103(a)

In the final Office Action, claims 9-17, 24-26, 50, 51, and 56-58 were rejected under 35 U.S.C. § 103(a) based on Granek et al. in combination with Powell et al. and one or more of the following references: Eguchi (U.S. Patent No. 3,909,814), Fierbaugh (U.S. Patent No. 4,987,958), Sears (U.S. Patent No. 6,032,745), and Wootton (U.S. Patent No. 3,848,231). Dependent claims 9-17, 24-26, 50, 51, and 56-58 are allowable for at least the same reasons their corresponding independent claims should be allowable. Amendment at 24.

III. Conclusion


Independent claims 1, 18, 41, 43, 52, and 60 are allowable. Further, each of dependent claims 2-17, 19-26, 42, 44-51, 53-59, and 61 is allowable. Amendment at 24.

Applicants respectfully request reconsideration of this application, withdrawal of the outstanding claim rejections, and allowance of claims 1-26 and 41-61.

Please grant any extensions of time required to enter this Request and charge any additional required fees to our Deposit Account No. 6-0916.

Respectfully submitted,
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Dated: July 27, 2006

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